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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,697	04/16/2001	Qin Zhang	1504-0071	6247

7590 07/01/2005  
Harold C. Moore  
Maginot, Addison & Moore  
Bank One Center/Tower  
111 Monument Circle, Suite 3000  
Indianapolis, MN 46204-5115

EXAMINER

HUYNH, SON P

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/835,697	<b>Applicant(s)</b> ZHANG ET AL.	
	<b>Examiner</b> Son P. Huynh	<b>Art Unit</b> 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2001.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "Fig. 1A" (page 10, lines 9-10); "adder 306" (page 31, lines 14-15; page 32, line 10; page 33, lines 2,3,5; page 34, line 14); reference number "18" in Figure 5A should be changed to "20". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 1-6 are objected to because of the following informalities:

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In claim 1 line 12, the phrase "the baseband signal" should be replaced as -- a baseband signal — Appropriate correction is required.

### ***Double Patenting***

3. Claims 1-9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5-9, 35-36, 39, 41-42 of U.S. Patent No. 6,219,095 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other as discussed below:

Regarding claim 1 of instant application, Patent claim 1 recites a method of determining noise in a CATV channel, the CATV channel comprising a predetermined frequency band, the CATV channel being in-service when a transmitted carrier signal having a frequency in the predetermined frequency band is present, the method comprising:

- a) obtaining a television signal corresponding to a predetermined CATV channel, the television channel comprising a carrier signal modulated by an information signal;
- b) sampling at least a part of the television signal to produce a digital signal segment, said digital signal segment comprising a carrier component, a noise signal component, and an information signal component, wherein said information signal component has a substantially predetermined signal pattern;

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d) obtaining an estimate of the information signal and subtracting the estimate from the baseband signal, thereby producing a noise signal estimate (col. 21, lines 30-44, lines 52).

Claim 1 of the instant application is broader in scope than Patent claim 1.

Regarding claims 2-6 of the instant application, the limitations of the as recited respectively correspond to the limitations as recited in Patent claims 5-9 (col. 22, lines 1-26).

Regarding claim 7 of the instant application, the patent claims recite a method of determining noise in a television signal, the television signal comprising a baseband signal modulated onto the carrier signal, the method comprising:

- a) obtaining a television signal segment comprising a baseband component, said baseband component further comprising a noise signal component and an information signal component, the information signal component having a substantially predetermined signal pattern;
- b) obtaining an estimate of the information signal and subtracting the estimate from the baseband signal, thereby producing a noise signal estimate;
- c) obtaining a noise measurement by first generating a frequency response to the noise signal estimate, wherein the frequency response comprises a plurality of frequency bins, each representative of an energy of the noise signal component within a predetermined frequency band (col. 25, lines 12-26);

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d) employing a digital filter to substantially reduce the hum noise in the noise signal estimate (col. 25, lines 45-47); and

e) processing the frequency response to obtain a measurement of one of CTB noise or CSO noise (col. 25, lines 32-33).

Regarding claims 8-9 of the instant application, the limitations as recited respectively correspond to the limitations as recited in Patent claims 41-42 (col. 26, lines 1-20).

Allowance of claims 1-9 would result in an un-warranted timewise extension of the monopoly granted for the invention as defined in claims 1,5-9,35-36,39,41-42 of Patent No. 6,219,095. Therefore, the doubling patenting rejection is properly applied.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Montgomery et al. (US 5,831,679) discloses network for retrieval and video transmission of information.

Ward (US 5,661,529) discloses measurement of noise impairments of TV signals.

Shi et al. (US 6,310,646) discloses method and apparatus for measuring a radio frequency signal having program information and control information.


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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P. Huynh whose telephone number is 571-272-7295. The examiner can normally be reached on 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher C. Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SPH  
June 23, 2005



CHRIS GRANT  
PRIMARY EXAMINER